

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) The electric power steering apparatus of claim 7, wherein

the biasing member biases said worm shaft deflectable toward said worm wheel, in a deflective direction of said worm shaft.

2. (Original) The electric power steering apparatus of claim 1, wherein

said worm shaft is deflectable in a side of said worm shaft, interlocked with an output shaft of said electric motor and an interlocking member interlocking said worm shaft and said output shaft is provided therebetween.

3. (Original) The electric power steering apparatus of claim 1, wherein

said worm shaft is supported in a gear housing having a tapped hole, and said biasing member includes a screw body tightly fastened in said tapped hole and a spring body interposed between said screw body and said worm shaft.

4. (Original) The electric power steering apparatus of claim 1, wherein

Claim Rejections - 35 U.S.C. § 112, First Paragraph

In support of the Examiner's rejection of claims 1-4, 7, 9-12, and 14, the Examiner asserts that the newly-added element "wherein the biasing member is movably acceptable only toward the concave member" is not disclosed in the specification. The Examiner asserts that the specification discloses biasing member 32 being movably acceptable toward and away from the concave member. Applicants respectfully disagree with the Examiner's assertions.

Exemplary support for this claim amendment is clearly recited in the specification on page 10, lines 16-21 as follows:

The worm shaft 70 in the gear housing 8 described above is supported such that the second bearing 17 located opposite the output shaft 60 is deflectable toward the worm wheel 72. A biasing member 30 including a spring body biasing the second bearing 17 in the deflective direction is provided to the gear housing 8.

Additional support for this claim amendment can be found on page 11, lines 10-21 as follows:

The biasing member 30 has a curved surface of a circular arc in section contacting an outer circumferential surface of the second bearing 17 and a spring supporting section, and, to be detailed, includes: a spring supporter 31 inserted so as to be movable toward the second bearing hole 82; a spring body 32 of a coil spring supported by the spring supporter 31; a screw body 33 adjusting a flexure amount of the spring body 32 contracted in the tapped hole 84; and a lock nut 34 screwed on the screw body 33. The biasing member 30 deflects the second bearing 17 toward the concave portion 83 by operating the screw body 33, in a state where the lock nut 34 is loose, to move the spring supporter 31.

Based upon the recitations set forth above, it is clear that the biasing member of the present invention is movably acceptable only toward a concave portion. As such, it is respectfully submitted that the newly-added claim element complies with the written description requirement and is sufficiently described in the specification in such a way so as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. It is respectfully requested that the outstanding rejection be withdrawn.

Claim Rejections - 35 U.S.C. § 112, Second Paragraph

The Examiner's rejection of claims 1-4, 7, 9-12, and 14 under 35 U.S.C. § 112, second paragraph, asserting the newly added element is inaccurate. However, as noted above, there is sufficient disclosure in the specification to support the newly added claim element and, further the newly added claim element is in accordance with the disclosure of the present invention. It is respectfully submitted that Applicants have particularly pointed out and distinctly claimed the subject matter, which Applicants regard as the invention. As such, it is respectfully requested that the outstanding rejection be withdrawn.

Claim Rejections - 35 U.S.C. § 102

The Examiner rejected claims 1-4, 7, and 9 under 35 U.S.C. § 102(b), asserting Kanazawa et al. anticipates the present invention. In reviewing the Examiner's rejection, it appears that the Examiner has failed to consider Applicants' amendments to the claims filed on June 10, 2004. As noted above, the claim amendments comply with the written description requirements set forth in 35 U.S.C. § 112, first paragraph, and further comply with the requirements set forth in 35 U.S.C. § 112, second paragraph. For the reasons set forth in Applicants' Reply filed June 10, 2004, Kanazawa et al. fails to anticipate the present invention as Kanazawa et al. fails to teach or suggest the biasing member being movably acceptable only toward the concave member.

Additionally, in accordance with the Examiner's suggestion, Applicants have amended claims 7 and 9 to recite "a steering shaft configured to engage a steering wheel." It is respectfully submitted that these amendments are being made without conceding the propriety of the Examiner's rejection, but merely to timely advance prosecution of the present application. Based upon this amendment, together with the arguments set forth above and the arguments included in Applicants' Reply filed June 10, 2004, it is respectfully requested that the outstanding rejection be withdrawn.

Claim Rejections - 35 U.S.C. § 103

With regard to the Examiner's multiple claim rejections using a variety of combinations of cited reference, it appears that the Examiner has failed to consider Applicants' claim amendments and arguments included in the Reply filed June 10, 2004. For the reasons set forth above, it is respectfully submitted that Applicants' amendments satisfy the requirements as set forth in 35 U.S.C. § 112, first and second paragraphs. Applicants included arguments in the Reply filed June 10, 2004, stating that the teachings of the cited references are insufficient to render the pending claims, as amended, obvious under 35 U.S.C. § 103. It is respectfully requested that the Examiner consider these arguments as filed, together with the claim amendments, and withdraw all of the outstanding 35 U.S.C. § 103(a) rejections.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Catherine M. Voisinet (Reg. No. 52,327) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.